

NEW RECORDS OF VASCULAR PLANTS FOR OHIO AND
CUYAHOGA COUNTY, OHIO

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ABSTRACT. Two hundred and thirty-six species and hybrids of vascular plants are listed as new records for Cuyahoga County, Ohio, and twenty-four of these taxa constitute new Ohio records. Three taxa are first reported for North America. Approximately 39% of the 236 taxa are native to the northeastern United States. Twenty listed species are designated by the Ohio Division of Natural Areas and Preserves as presumed extirpated, endangered, threatened, or potentially threatened, collectively. The abundance of new records is surprising and explanations are proposed.

Key Words: Ohio, alien species, native species, new records, hybrids

This paper is a continuation of our efforts to augment knowledge of plant distributions in Ohio overall, with emphasis on Cuyahoga County, Ohio (Wilder and McCombs 1999). It also complements the recent floristic contributions of others (Cusick 1992; Rabeler 1996; Rabeler and Cusick 1994; Vincent and Cusick 1998; Walters 1995). No flora focused solely on Cuyahoga County has yet been published, but major references to the Ohio flora attribute plant taxa specifically to Cuyahoga County (Andreas 1989; Braun 1961, 1967; Cooperrider 1995; Fisher 1988).

Cuyahoga County borders Lake Erie and ranks among the northernmost of Ohio's 88 counties. Repeatedly glaciated during the Pleistocene epoch, Cuyahoga County contains two of Ohio's five physiographic regions: the Glaciated Appalachian Plateau Region (elevated, hilly topography; Bissell and Frank

1979) and the Lake Plains Region (low-lying, relatively flat terrain; Campbell 1979). Urban land (especially Cleveland), suburbs, and rural areas are common. Certain natural areas are protected to different extents, including the Cleveland Metro-parks, various smaller parks, and part of the Cuyahoga Valley National Recreation Area.

MATERIALS AND METHODS

All specimens cited were collected in Cuyahoga County within the last 11 years. We collected virtually all specimens, but Mr. Robert Anthony and Mr. Michael T. Loos each provided one additional collection. Almost all specimens belong to the Wilder and McCombs Herbarium, most of which will be stored for an indeterminate period at Florida Gulf Coast University in Fort Myers, Florida. Eventually, the entire collection may be deposited at the Cleveland Museum of Natural History (CLM), where the material of *Cynanchum laeve* is now housed.

Plants were pressed and prepared as ordinary herbarium specimens. Specimens of *Wolffia* were fixed in a formalin-acid-alcohol solution and stored in vials of glycerine alcohol affixed to herbarium sheets.

Nomenclature follows Kartesz (1994), but for some taxa in the Appendix synonyms are given that appear in other relevant publications (e.g., Cooperrider 1995; Cooperrider et al. 2001). Species and hybrids were determined as new to North America, Ohio, and/or Cuyahoga County based on information in Andreas (1989), Braun (1961, 1967), Cooperrider (1995), Cooperrider et al. (2001), Cusick (1992), Cusick and Silberhorn (1977), Easterly (1964), Fisher (1988), Kartesz and Meacham (1999), Rabeler (1996), Rabeler and Cusick (1994), Schaffner (1928), Vincent and Cusick (1998), Walters (1995), Weishaupt (1971), and Wilder and McCombs (1999). Taxa were determined to be either native to the northeastern United States or alien based on information from one or more of the following sources: Bailey (1949), Wagner and Beitel (1993), and Weishaupt (1971).

RESULTS

Two hundred and twenty-two species and 14 hybrids, representing 73 families of vascular plants, are reported as new to

Cuyahoga County, and 24 of these taxa constitute new records for Ohio (Appendix). Three taxa are first reported for North America: *Cardamine bulbifera*, *Phellodendron lavalleyi*, and *Lonicera* × *salicifolia*. Ohio records include 16 species of 13 families (*Actinidia arguta*, *Bromus catharticus*, *Cardamine bulbifera*, *Chaerophyllum tainturieri*, *Crepis setosa*, *Cyperus houghtonii*, *Fraxinus excelsior*, *Galanthus elwesii*, *Hordeum brachyantherum*, *Muscari armeniacum*, *Phellodendron lavalleyi*, *Prunella laciniata*, *Rubus recurvicaulis*, *Saccharum ravennae*, *Sesamum orientale*, *Tetradium daniellii*) and eight hybrids of five families (*Carex albicans* var. *albicans* × *C. umbellata*, *Liatris pycnostachya* × *L. spicata*, *Lonicera* × *minutiflora*, *L. ruprechtiana* [= *L. × muscaviensis*], *L. × salicifolia*, *Narcissus × incomparabilis*, *N. × medioluteus*, *Tradescantia ohiensis* × *T. virginiana*).

The following plant families rank highest according to the number of county records per family: Poaceae (31), Brassicaceae (18), Cyperaceae (16), Asteraceae (15), Scrophulariaceae (10), Rosaceae (9), Fabaceae (7), Caryophyllaceae (6), Salicaceae (6), Caprifoliaceae (5), Lamiaceae (5), and Ranunculaceae (5). Only approximately 39% of the 236 species and hybrids (i.e., 93 taxa) are native to the northeastern United States (Appendix). Families with solely native species as county records include all families of pteridophytes as well as the Cyperaceae and Hypericaceae. By contrast, the Brassicaceae and Poaceae include many alien species as county records, and *Cardamine × maxima*, *Descurainia pinnata*, and *Rorippa sessiliflora* are the sole native taxa of the 18 listed taxa of Brassicaceae.

Twenty species here newly reported for Cuyahoga County are cited in the *Rare native Ohio plants 2000–2001 status list* (Ohio Division of Natural Areas and Preserves 2000). These species are listed as presumed extirpated (*Cyperus houghtonii*; however, see comments below), endangered (*Amelanchier sanguinea*, *Baptisia australis*, *Chamaesyce serpens*, *Dryopteris clintoniana*, *Hypericum gymnanthum*, *Nuttallanthus canadensis*, *Panicum lindheimeri*), threatened (*Carex albolutescens*, *Descurainia pinnata*, *Gymnocarpium dryopteris*, *Helianthus mollis*, *Passiflora incarnata*), and potentially threatened (*Carex atherodes*, *C. viridula*, *Deschampsia flexuosa*, *Hedyotis nigricans*, *Hypericum majus*, *Opuntia humifusa*, *Spiranthes ovalis*). Each of the 20 species is known from only one to several locations in Cuyahoga County (Appendix).

DISCUSSION

Two state records require explanation: *Cyperus houghtonii* and *Chaerophyllum tainturieri*. Braun (1967) and Weishaupt (1971) attributed *Cyperus houghtonii* to Ohio; however, Braun (1967) specified that *C. houghtonii* is “Represented in Ohio by a single specimen . . .” in the herbarium of Bowling Green State University (BGSU). Braun did not otherwise distinguish the specimen, but we later identified it as 13 Sep 1895, *E. L. Mosely s.n.* (BGSU). Mosely called the specimen *C. houghtonii*, as did N. W. Easterly (annotation of 1958). However, Mr. Allison W. Cusick (Chief Botanist of the Ohio Division of Natural Areas and Preserves) annotated it as “depauperate *Cyperus schweinitzii* Torrey.” We examined the specimen and verified Cusick’s identification, based partly on the scabrous, sharply-angled fertile culm and the conspicuously mucronate scales (features of *C. schweinitzii* but not of *C. houghtonii*; Voss 1972). Thus, we list *C. houghtonii* as a new state record. Similarly, Weishaupt (1971) listed *Chaerophyllum tainturieri* from Ohio, but Cooperrider (1995) identified all Ohio specimens as *C. procumbens* (not including our material). Dr. Anton Reznicek (MICH) has confirmed our identifications of *Cyperus houghtonii* and *Chaerophyllum tainturieri*. In contrast, Kartesz and Meacham (1999) reported neither species for Ohio, and Cooperrider et al. (2001) deleted *C. houghtonii* and *C. tainturieri* from their species list of the Ohio flora.

Cardamine ×*maxima* and *Tagetes patula* are presently listed as new for Cuyahoga County. They were earlier reported for Ohio by Schaffner (1928; *Dentaria maxima* Nutt.) and Moldenke (1944), respectively. They were also attributed to Ohio by Kartesz and Meacham (1999), but not by Cooperrider et al. (2001). In addition, Kartesz and Meacham (1999) reported *Alopecurus geniculatus* var. *geniculatus* for Ohio, based on a personal communication made to them; however, the source of this communication was unidentified.

We did not find *Lotus tenuis* listed in publications on the Ohio flora, but Isely (1990) attributed *L. tenuis* to Ohio in his treatment of the Fabaceae of the southeastern United States. We consider Isely’s report tentative, because he did not cite specimens of *L. tenuis*. Also, Andreas (1989) and Braun (1967) listed *Panicum lanuginosum* Elliott for Cuyahoga Co., but did not specify whether the segregate species *P. implicatum* Britton and *P. lindheimeri*

Nash occur here. Thus, the latter two species are here listed as county records.

Tradescantia ohiensis, *T. virginiana*, and *T. ohiensis* × *T. virginiana* all grow in Cleveland, and our informal field observations suggest that the hybrid is common in Cleveland. Voss (1972) identified certain Michigan plants as apparently of this hybrid. He also reported white-flowered specimens of *T. ohiensis* from Michigan, as do we of *T. ohiensis* × *T. virginiana* from Ohio (Appendix).

Kartesz and Meacham (1999), but not Cooperrider et al. (2001), reported *Phellodendron amurense* Ruprecht for Ohio; however, our material of *Phellodendron* is *P. lavallei*, not *P. amurense*, based on considerable abaxial pubescence of the foliage leaves (Rehder 1940). Also, Dr. Anton Reznicek annotated our specimens as *P. lavallei*.

Cooperrider et al. (2001), Kartesz and Meacham (1999), Rabaler (1996), and Vincent and Cusick (1998) only recently reported certain species from Ohio that are here listed as records for Cuyahoga County (*Acer campestre*, *Amaranthus powellii*, *Cerastium brachypetalum*, *Gypsophila scorzonerifolia*, *Mahonia aquifolium*, *Prunus subhirtella*, *Sagina japonica*, *Salix matsudana*, and *Viburnum plicatum*). Thus, these species are not listed in older comprehensive accounts of the Ohio flora (Andreas 1989; Braun 1961; Cusick and Silberhorn 1977; Weishaupt 1971). Other species that Cooperrider et al. (2001) and Kartesz and Meacham (1999) first reported for Ohio are apparently becoming established in Cuyahoga County, being here reported from four locations (*Centaurea debeauxii*) and five locations within the County (*Salix matsudana*; Appendix).

Certain species here listed as new for Cuyahoga County were previously reported from Ohio, but from locations distant from Cuyahoga County (Andreas 1989; Braun 1967; Cooperrider 1995; Cusick and Silberhorn 1977; Easterly 1964). For each such species, the previously reported location nearest to Cuyahoga County is separated from Cuyahoga County by a distance of approximately 120 miles (i.e., nearly half the length of Ohio), or more. The reported ranges of most such species are hereby extended more-or-less northward: *Acer campestre*, *Agropyron desertorum*, *Ampelopsis cordata*, *Aureolaria laevigata*, *Buddleja davidii*, *Cerastium brachypetalum*, *Chorispora tenella*, *Croton monanthogynus*, *Ilex opaca*, *Liquidambar styraciflua*, *Mahonia*

aquifolium, *Microstegium vimineum*, *Paspalum laeve*, *Passiflora incarnata*, *Physalis philadelphica*, *Rorippa sessiliflora*, *Sisymbrium loeselii*, *Spiranthes ovalis*, and *Xanthorhiza simplicissima*; however, other ranges are extended eastward (*Lepidium ruderales*) or both northward and eastward (*Descurainia sophia*). Presently reported plants of *Xanthorhiza simplicissima* were probably garden escapes, because this is a cultivated species, albeit also native to the northeastern United States (Bailey 1949; Gleason and Cronquist 1991), and because our plants grew on parkland, in woods by a dump (Appendix). For Ohio, Braun (1961) listed *Akebia quinata*, and Braun (1961) and Weishaupt (1971) reported *Quercus robur*; however, they listed no localities within Ohio for these species.

Eight species presently reported as Cuyahoga County records were recently listed as new for Lorain County, which borders Cuyahoga County to the west: *Alisma triviale*, *Betula pendula*, *Celastrus orbiculata*, *Cercis canadensis*, *Hedera helix*, *Hieracium piloselloides*, *Narcissus poeticus*, and *Zea mays* (Walters 1995). Also, the present record of *Berberis vulgaris*, an alien species, is significant because Andreas (1989) considered the species “now presumably extirpated from Ohio.” Indeed, we observed only a small clump of this species.

Natural assemblages of vascular plants within Ohio characteristically contain much smaller percentages of alien species and hybrids than the approximately 61% reported here. Cooperrider et al. (2001) found that approximately 33% of Ohio species, additional major infraspecific taxa, and interspecific hybrids, collectively, were alien. Cooperrider (1995) considered 25% of “some 700 species” of selected dicotyledonous families of Ohio as alien to the state. Statistics presented by Andreas (1989) indicate that approximately 28% of species and hybrids of vascular plants of the Glaciated Allegheny Plateau region of Ohio are alien. Corresponding statistics for unglaciated Ohio reveal approximately 24% of species to be alien (Cusick and Silberhorn 1977). Wilder and McCombs (1999), in a floristic survey of Fawn Pond and surrounding territory (Cuyahoga County), presented a comparable figure of approximately 26%.

We offer three primary explanations for the abundance of new records from Ohio and Cuyahoga County. First, the inordinately high percentage of presently reported alien species suggests that many species may only recently have entered, or become prom-

inent in, Cuyahoga County. Second, no flora or plant checklist has yet been published for Cuyahoga County, suggesting that previous botanists might have focused insufficient attention on this area. Third, Cleveland, a largely urban area by Lake Erie, manifests abundant shipping, train traffic, and road traffic. Traffic and/or the distinctive habitats of railroad tracks and roadsides may have favored species introductions. Indeed, we have established many new plant records solely along railroad tracks, and present examples include *Acalypha gracilens*, *Agropyron desertorum*, *Amaranthus powellii*, *Bromus catharticus*, *Buddleja davidii*, *Bulbostylis capillaris*, *Cerastium brachypetalum*, *Chaerophyllum tainturieri*, *Cyperus houghtonii*, *Descurainia pinnata*, *D. sophia*, *Gypsophila scorzonerifolia*, *Helianthus mollis*, *Hordeum brachyantherum*, *H. pusillum*, *H. vulgare*, *Ipomoea hederacea*, *I. pandurata*, *Linaria dalmatica*, *Mahonia aquifolium*, *Opuntia humifusa*, *Papaver somniferum*, *Passiflora incarnata*, *Phellodendron lavalleyi*, *Quercus robur*, *Saccharum ravennae*, *Secale cereale*, *Sinapis alba*, *Strophostyles leiosperma*, *Tagetes patula*, *Vaccaria hispanica*, and *Vulpia octoflora*. Our observations correlate with previous conclusions that railroad lands may support diverse adventive floras (Muhlenbach 1979).

Another reason for our many new records involves the genus *Lonicera*. We identified the three *Lonicera* hybrids new for Ohio, using Green's (1966) key to species and hybrids in the *L. tatarica* complex. These three hybrids, as well as various other *Lonicera* hybrids, are not treated in many comprehensive floristic works (Braun 1961; Cooperrider 1995; Fernald 1950; Gleason 1968; Gleason and Cronquist 1991; Weishaupt 1971); thus, previous investigators may have misidentified them. We have observed that numerous *Lonicera* individuals in Cuyahoga County are hybrids, particularly of *Lonicera* × *bella* (previously known from Cuyahoga County).

In recent years, urban Cuyahoga County (especially railroad land) has experienced an apparent increase in disturbances such as bulldozing and the application of herbicides. Thus, plant diversity has been reduced in some of our finest urban plant localities. Unusual alien and native species observed in Cleveland and nearby in previous years are absent or nearly so (e.g., *Acalypha gracilens*, *Aegilops cylindrica*, *Amaranthus tuberculatus*, *Ame-lanchier stolonifera*, *Calluna vulgaris*, *Hedyotis nigricans*, *Helianthus mollis*, *Hordeum pusillum*, *Iva xanthifolia*, *Nuttallanthus*

canadensis, *Prunus mahaleb*, *Salvia reflexa*, and *Vulpia octoflora*). Muhlenbach (1979), in keeping with present findings, reported that “. . . weed killing has had disastrous effects on railroad vegetation everywhere.” Within rural areas of Cuyahoga County overall, continuing rampant development, other exploitation of natural lands (including parks), and excessive browsing by deer seriously threaten biodiversity.

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APPENDIX

SPECIES AND HYBRIDS THAT REPRESENT NEW RECORDS FOR OHIO
AND CUYAHOGA COUNTY.

Data are presented in the following order after the name of a species or hybrid: relevant synonym (in brackets); designation, if any, in the *Rare native Ohio plants 2000–2001 status list* (Ohio Division of Natural Areas and Preserves 2000); habitat(s); the collection number of a representative collection together with the municipality of this collection; any additional municipality(ies) represented by collections in the Wilder and McCombs Herbarium (indicated between parentheses). * = alien to the northeastern United States. SR = species and hybrids newly reported for Ohio; remaining species and hybrids are new solely to Cuyahoga County. All collection numbers are those of Wilder and McCombs except where indicated as collected by M. T. Loos or R. Anthony. Abbreviations represent municipalities or railroad tracks (RR): B, Brecksville; Bc, Beachwood; Be, Bedford; BeH, Bedford Heights; Bk, Brooklyn; BkH, Brooklyn Heights; Bn, Bentleyville; BH, Broadview Heights; BP, Brook Park; Br, Berea; Bt, Bratenahl; BV, Bay Village; C, Cleveland; CH, Cuyahoga Heights; ClH, Cleveland Heights; E, Euclid; EC, East Cleveland; FP, Fairview Park; G, Glenwillow; GH, Garfield Heights; GM, Gates Mills; HH, Highland Heights; HV, Hunting Valley; I, Independence; L, Lakewood; Li, Lindale; M, Mayfield; MaH, Mayfield Heights; MH, Maple Heights; MiH, Middleburg Heights; MoH, Moreland Hills; MV, Mayfield Village; NO, North Olmsted; NR, North Royalton; OF, Olmsted Falls; OT, Olmsted Township; P, Parma; PH, Parma Heights; PP, Pepper Pike; RoR, Rocky River; S, Solon; SE, South Euclid; SeH, Seven Hills; SH, Shaker

Heights; St, Strongsville; UH, University Heights; VV, Valley View; W, Westlake; WaH, Warrensville Heights; WH, Walton Hills. Dash(es) between abbreviations signifies(y) collection(s) made by the boundary or boundaries between municipalities.

PTERIDOPHYTES

DRYOPTERIDACEAE

- Cystopteris tenuis* (Michx.) Desv. – Vertical rock outcrop; 11679, Be.
Dryopteris × *boottii* (Tuck.) Underw. – Swamp within gorge; 8455, B.
Dryopteris clintoniana (D. C. Eaton) Dowell – Endangered; vertical rock outcrop; side of creek; 11680, Be.
Gymnocarpium dryopteris (L.) Newman – Threatened; vertical rock outcrop; 11639, Be.

EQUISETACEAE

- Equisetum* × *ferrissii* Clute – Wetland and slope (both habitats by RR tracks); 4508, C.

LYCOPODIACEAE

- Lycopodium hickeyi* W. H. Wagner, Beitel & Moran – Woods; fields; 10349, HH (B, BV-W, GH-VV).

MONOCOTYLEDONS

ALISMATACEAE

- Alisma triviale* Pursh – Near creek; water along railroad tracks; in ditch; 6066, B (C, L).

AMARYLLIDACEAE

- **Galanthus elwesii* Hook. f. – SR. Along trail on forested ridge; 12723, C.
 **Narcissus* × *incomparabilis* P. Mill. – SR. Along railroad tracks; woodlands; 13158, C (CIH, MoH).
 **Narcissus* × *medioluteus* P. Mill. – [*Narcissus biflorus* W. Curtis] SR. By railroad tracks; field; woodland; 13309, P (Bk-C, CIH-EC).
 **Narcissus poeticus* L. – Along RR tracks; clump in woodland; 10651, BV-W (GM).

COMMELINACEAE

- Tradescantia ohiensis* Raf. × *Tradescantia virginiana* L. – SR. Three forms are represented, as follows:
- a. Forma with blue flowers comparable in size to flowers of typical *T. ohiensis* and *T. virginiana*; by RR tracks; along alley by RR tracks; 7090, C.
 - b. Forma with blue flowers much larger than those of typical *T. ohiensis*

and *T. virginiana*, apparently a garden escape; along railroad tracks; 11959, RoR.

- c. Forma with white petals, green sepals, and blue stamen hairs, the flower size comparable to that in typical *T. ohioensis* and *T. virginiana*; behind urban cemetery and by RR tracks; 11995, C.

CYPERACEAE

Bulbostylis capillaris (L.) Kunth ex C. B. Clarke – In highly insolated cinder along RR tracks and where RR tracks were removed; 11523, C-E (C, MH).

Carex albicans Willd. ex Spreng. var. *albicans* × *Carex umbellata* Schkuhr ex Willd. – [*C. albicans* var. *albicans* = *Carex artitecta* Mack.] SR. Upland bordering Rocky River; 10740, NO.

Carex albolutescens Schwein. – Threatened; land-locked region between RR tracks; meadow; swamp; 5163, E (B, St).

Carex atherodes Spreng. – Potentially threatened; insolated swamp; 14851, MiH.

Carex careyana Torr. ex Dewey – Woods; 10733, B.

Carex conjuncta Boott – Along tow path of Ohio and Erie Canal; along creek; along road; 11947, WH (Be, CH).

Carex hitchcockiana Dewey – Near path in woodland; 14658, BP-NO-OT.

Carex molesta Mack. ex Bright – Wetland along RR tracks; abundant in field; 4056, C (I, MH).

Carex pellita Muhl. ex Willd. – [*C. lanuginosa* Michx.] Wet ditch along road; 4274, B.

Carex texensis (Torr.) Bailey – Base of shaded hill; 14752, B.

Carex viridula Michx. – Potentially threatened; grassy area by railroad tracks; 13814, C.

Cyperus houghtonii Torr. – SR. Presumed extirpated; in highly insolated dry substrate along RR tracks; 11530, C-E.

Cyperus squarrosus L. – [*C. aristatus* Rottb. and *C. inflexus* Muhl.] Cracks in pavement of parking lot; 14146, C.

Eleocharis rostellata (Torr.) Torr. – Field; 14096, Bc.

Rhynchospora capitellata (Michx.) Vahl – Wet meadow; 8642, HH.

Scirpus acutus Muhl. ex Bigelow – In ditch; 3813, B.

DIOSCOREACEAE

**Dioscorea oppositifolia* L. – [*D. batatas* Decne.] Ravine; disturbed urban land; 7564, CIH-EC (C).

LEMNACEAE

Wolffia brasiliensis Wedd. – [*W. papulifera* C. H. Thomps.] Beaver pond; lagoon; 11168, GM-M (BP-NO-OT; I).

Wolffia columbiana H. Karst. – Pond; edge of lake; 11287, NR (SH).

Wolffia punctata Griseb. – Pond; 14003, I.

LILIACEAE

- **Allium cepa* L. – Embankment along RR tracks; 4244, C (WaH).
Allium schoenoprasum L. – In garden debris dumped within woodland; 13541, P.
 **Muscari armeniacum* Leichtlin ex Baker – SR. In piles of dirt and debris in vacant lot and along RR tracks; 7935, C (MH).
 **Scilla siberica* Haw. ex Andr. – Woods; edge of gorge; 7963, vicinity GM (CIH-SH).

NAJADACEAE

- Najas guadalupensis* (Spreng.) Magnus – Pond; 14892, I.

ORCHIDACEAE

- Spiranthes ochroleuca* (Rydb.) Rydb. – Shaded area along power lines; portion of old field bordering forest; 11776, I (S).
Spiranthes ovalis Lindl. – Potentially threatened; disturbed land; field by RR tracks; 11554, S (B).

POACEAE

- **Aegilops cylindrica* Host – Ballast between RR tracks; along road; eroded slope beneath terminus of RR bridge; 4027, C (BkH).
 **Agropyron desertorum* (Fisch. ex Link) J. A. Schult. – Clearing by terminus of railroad bridge; 13978, BkH.
 **Agrostis stolonifera* L. – In park; 2933, CIH-EC.
 **Alopecurus geniculatus* L. – Dense population in depressed grassy area along parkway; insolated land by power lines; 10721, St (Bk-C, P).
 **Alopecurus pratensis* L. – Fields, swamp, embankment along RR tracks; 12133, W (B, BH, CH, S, SH).
 **Apera interrupta* (L.) P. Beauv. – Insolated urban field; dry, highly insolated substrate along RR tracks; 11050, C (B, BkH-C).
 **Bromus catharticus* Vahl – SR. Eroded slope at terminus of railroad bridge; 13639, BkH.
 **Bromus racemosus* L. – Disturbed, insolated urban land by Cuyahoga River; entrance ramp to I-90; along RR tracks; under bridge; on jetty extending into Lake Erie; along trail; 3972, C (BkH, C, G).
 **Chloris verticillata* Nutt. – Along urban sidewalks and tree lawn; 4831, C.
Danthonia compressa Austin ex Peck – Field, woods; 14311, P (CIH-EC; B, EC, HH).
Deschampsia flexuosa (L.) Trin. – Potentially threatened; promontory in woods; 4420, CIH-EC.
Eragrostis capillaris (L.) Nees – Along RR tracks; along alley; vacant disturbed urban land; by wall in disturbed area; 2537, C (BeH; EC; MH).
 **Eragrostis curvula* (Schrad.) Nees – Urban field bordering RR tracks; 11583, C-EC.
 **Eragrostis pilosa* (L.) P. Beauv. – Vacant, highly insolated urban land; tree lawn; overgrown garden; ballast between RR tracks; 4838, C.

- **Hordeum brachyantherum* Nevski – SR. Meadow along RR tracks; 14778, Bk-C.
- Hordeum pusillum* Nutt. – Solitary plant between RR tracks; 3930, C.
- **Hordeum vulgare* L. – Terminus of railroad bridge; 13809, BkH.
- **Microstegium vimineum* (Trin.) A. Camus var. *imberbe* (Nees) Honda – Shaded roadside; 14028, P.
- **Miscanthus sinensis* Andersson – Second-growth woodland; 8982, BH.
- Muhlenbergia tenuiflora* (Willd.) Britton, Sterns & Poggenb. – Eroded slopes in woods; 11376, B-BH (WH).
- Panicum implicatum* Britton – [*Dichanthelium acuminatum* (Sw.) Gould & C. A. Clark var. *fasciculatum* (Torr.) Freckmann] Field, clearing beneath powerlines, insolated slump, woodland, along railroad tracks, trailside, swamp; 13729, P (B, BH, Bk, C, CIH-EC, E, FP-RoR-W, MH, OF).
- Panicum lindheimeri* Nash – [*Dichanthelium acuminatum* (Sw.) Gould & C. A. Clark var. *lindheimeri* (Nash) Gould & C. A. Clark] Endangered; disturbed land; 13730, P.
- **Panicum miliaceum* L. – Along roads; under powerlines; dried portion of creek bed; along RR tracks; 7914, C (Br, CH, L).
- Paspalum laeve* Michx. – In insolated lawn; 11519, B.
- **Poa nemoralis* L. – Two formas are represented, the typical forma in which living shoots are green and a forma with blue-green living shoots. Woods, by Rocky River; 3156, EC (C, CIH, CIH-EC, E).
- **Saccharum ravennae* (L.) L. – [*Erianthus ravennae* (L.) P. Beauv.] SR. Along railroad tracks; 14062, C.
- **Secale cereale* L. – Eroded slope at terminus of railroad bridge; 13654, BkH.
- **Sorghum bicolor* (L.) Moench – Along roads; field; lawn; urban waste areas; among boulders; dried-up portion of creek bed; along RR tracks; 4903, C (Be, BV-W, CIH-EC, GH, SH).
- **Vulpia myuros* (L.) K. C. Gmel. – Along RR tracks; disturbed, insolated, urban land; 11174, L (Bk-C, BkH-C; C, CIH-EC).
- Vulpia octoflora* (Walter) Rydb. – Between RR tracks; 3931; C.
- **Zea mays* L. – Base of embankment along RR tracks; disturbed land by bank of Cuyahoga River; 11779, G-S (BkH).

TYPHACEAE

- Typha × glauca* Godr. – Urban wetland along RR tracks; 10258, C.

DICOTYLEDONS

ACERACEAE

- **Acer campestre* L. – Along railroad tracks, in open sunlight; woodlands; 10652, RoR (Bt, CIH).

ACTINIDIACEAE

- **Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq. – SR. Abundant climber on trees at forest edges (along road and by swamp in woodland); 5580, SH (CH).

AMARANTHACEAE

**Amaranthus blitum* L. – Waste area; overgrown urban garden; bare dirt; emerged portions of beds of Cuyahoga River and of creek; by creek and river; along railroad tracks; 8238, Bt (C, CH, CIH-EC, E, I, P, RoR).

**Amaranthus powellii* S. Watson – Waste area beneath railroad bridge; 14012, BkH.

Amaranthus tuberculatus (Moq.) Sauer – Urban flower bed; large flower pot retained outdoors; 9040, C (CIH).

APIACEAE

**Anethum graveolens* L. – Edge of parking lot at urban farmers' market; 11425, EC.

**Anthriscus sylvestris* (L.) Hoffm. – Along Big Creek and Cuyahoga River; 13383, C.

Chaerophyllum tainturieri Hook. var. *tainturieri* – SR. Dry, highly insolated substrate along railroad tracks; 11047, BV-W.

AQUIFOLIACEAE

**Ilex crenata* Thunb. – Woodlands (including woodland land-locked between RR tracks); 6548, E (Bc).

Ilex opaca Aiton – Woodlands, field; 12086, NO-W (HH, P).

ARALIACEAE

**Hedera helix* L. – In woods; 10368, BV (Bc, Bt, OF, CIH).

ASCLEPIADACEAE

Cynanchum laeve (Michx.) Pers. – [*Ampelamus albidus* (Nutt.) Britton] On hedge along sidewalk; 13003, C.

ASTERACEAE

Aster subulatus Michx. – Along roads (sometimes in a ditch); under bridge; disturbed urban land near RR tracks; 8856, C (B, Be, G).

Bidens aristosa (Michx.) Britton – Fields (along RR tracks and not so); 975, W (MH).

Brachyactis ciliata (Ledeb.) Ledeb. – [*Aster brachyactis* Blake] Beneath bridges; along roads; along parking lot; disturbed land beneath power lines; 11648, Be (B, Bc, BH, C, FP, I, NR, P).

**Calendula officinalis* L. – Among boulders by Lake Erie; 8818, C.

**Centaurea debeauxii* Gren. & Godr. – [*C. pratensis* Thuill.] Along railroad tracks; insolated waste area; forest edge bordering disturbed, insolated land; 14431, C (BP, MiH, P).

**Crepis setosa* Haller f. – SR. Large population in overgrown lawn; 14081, UH.

**Dyssodia papposa* (Vent.) A. S. Hitchc. – Eastern edge of I-71; 9297, St.

Helianthus hirsutus Raf. – Slump and level land along RR tracks; 11497, B (C).

Helianthus mollis Lam. – Threatened; disturbed area of railroad land; 13948, MH.

**Hieracium piloselloides* Vill. – Lawn; along and between RR tracks; insolated disturbed areas (including slope); in shade at farmers' market; 10924, OF (B, BeH, BV, C, E, EC, P, S).

Iva xanthifolia Nutt. – Ballast along RR tracks; highly insolated dirt along urban road; 4980, C.

**Leontodon taraxacoides* (Vill.) Mérat – Two formas are represented, as follows:

a. Typical forma with yellow ligulate corollas; lawns, cemetery; 4445, B (C, CIH, GM-M, MV, SE).

b. Forma with cream-colored ligulate corollas; lawn bordering road; 4447, B.

Liatris pycnostachya Michx. × *Liatris spicata* (L.) Willd. – SR. Field; 14101, Bc.

Rudbeckia fulgida Aiton – Fields; wetland; 1908, MH (NR-P, SH).

**Tagetes patula* L. – Dry substrate along railroad tracks; exposed portion of creek bed; 11623, BV-W (P).

BERBERIDACEAE

**Berberis vulgaris* L. – In woods; 7173, GM-M.

**Mahonia aquifolium* (Pursh) Nutt. – [*Berberis aquifolium* Pursh] Along railroad tracks; 10614, Bk-C (Bc, C).

BETULACEAE

**Betula pendula* Roth – Meadow; wasteland bordering railroad tracks; 13155, C (Bc).

BIGNONIACEAE

**Catalpa bignonioides* Walter – Along alley; along RR tracks; edge of field; 6954, C (P).

Catalpa speciosa (Warder) Warder ex Engelm. – Along RR tracks; 6958, CIH-EC (MH).

BORAGINACEAE

**Asperugo procumbens* L. – Beneath high bridge; 7024, C-FP.

**Heliotropium europaeum* L. – Highly insolated urban waste land near Cuyahoga River; 4427, C.

**Myosotis arvensis* (L.) Hill – Flood plain of Chagrin River; 7177, GM.

**Myosotis stricta* Link ex Roem. & J. A. Schult. – Urban and rural lawns; 6794, C (B).

BRASSICACEAE

**Brassica juncea* (L.) Czern. – Lawn and eroded slope beneath RR bridge over Cuyahoga River; 11816, CH (BkH).

**Cardamine bulbifera* (L.) Crantz – SR. Woods and disturbed area; 10915, Bt.

**Cardamine flexuosa* With. – Weed in flower bed; by picnic area; 13125, C (Br).

- Cardamine* × *maxima* (Nutt.) Wood – [*Dentaria maxima* Nutt.] Woodland by Chagrin River; 13324, Bn (MoH).
- **Cardamine pratensis* L. var. *pratensis* – Lawns; land by shore of Cuyahoga River; 5104, EC (C, CIH, SH).
- **Chorispora tenella* (Pall.) Alph. de Candolle – Along and between RR tracks; 6507, C.
- Descurainia pinnata* (Walter) Britton – Threatened; dry, fine ballast along RR tracks; 10666, BV-W.
- **Descurainia sophia* (L.) Webb ex Prantl – Between and near RR tracks; land beneath terminus of RR bridge over Cuyahoga River; 4967, C (BkH).
- **Erucastrum gallicum* (Willd.) O. E. Schulz – Along RR tracks (sometimes in railroad ballast); rocky field; 11870, MH (C, G, L).
- **Erysimum cheiranthoides* L. – Muck of exposed portion of bottom of Cuyahoga River; along and between RR tracks; weed in flower bed; 11252, CH (BV-W, C, E).
- **Erysimum repandum* L. – Along and between RR tracks; along roads; cleared land beneath power lines; dump; 5240, C (B, Bk-C, Br, G, vicinity VV).
- **Lepidium ruderale* L. – Insolated, recently planted lawn; insolated barren land; emersed portion of stream bed; 8409, C (Br, P).
- **Lobularia maritima* (L.) Desv. – Exposed portion of creek bed; dumped debris along RR tracks; along curb in urban area; 9414, BV-W (C, P).
- **Lunaria annua* L. – Escape in lawn along I-90; 6832, C.
- Rorippa sessiliflora* (Nutt.) A. S. Hitchc. – Shore of Cuyahoga River; 14898, I.
- **Sinapis alba* L. – [*Brassica hirta* Moench] Disturbed land by terminus of railroad bridge; 13626, BkH.
- **Sisymbrium loeselii* L. – Edge of apparently vacant building within urban area; 8217, C.
- **Thlaspi alliaceum* L. – Edge of entrance ramp onto I-90; 5311, C.

BUDDLEJACEAE

- **Buddleja davidii* Franch. – Ballast along railroad tracks; 14124, MH.

CACTACEAE

- Opuntia humifusa* (Raf.) Raf. – Potentially threatened; in ditch near railroad tracks; 14164, C.

CALLITRICHACEAE

- Callitriche terrestris* Raf. – More-or-less bare soil of parks and picnic areas; 6238, EC (B, SH).

CAPRIFOLIACEAE

- **Lonicera* × *minutiflora* Zabel – SR. Along RR tracks; 9627, L (B).
- **Lonicera ruprechtiana* Regel – [*Lonicera* × *muscaviensis* Rehder] SR. Along RR tracks; roadside; 12287, C (B).
- **Lonicera* × *salicifolia* Dieck ex Zabel – SR. High on ridge along Rocky River; 10749, NO.

**Viburnum plicatum* Thunb. – Woodland; flood plain; along dirt road; 11963, RoR (C, GM-M).

Viburnum rafinesquianum J. A. Schult. – Woods (land-locked area between RR tracks); 6226, E.

CARYOPHYLLACEAE

**Cerastium brachypetalum* Pers. – Highly insolated land along railroad tracks; 13313, C.

**Cerastium glomeratum* Thuill. – [*Cerastium viscosum* L.] Lawns; vacant disturbed urban and nonurban land; along RR tracks; 6480, C (BkH, Br, BV-RoR-W, CIH, CIH-EC, HH, PP, VV).

**Gypsophila scorzonerifolia* Ser. – Dry, insolated substrate along RR tracks; 11380, C-EC.

**Sagina japonica* (Sw.) Ohwi – Field near forest edge; 10945, BV.

**Scleranthus annuus* L. – Lawn; dirt pile on vacant urban land; 6625, C (vicin. SH).

**Vaccaria hispanica* (P. Mill.) Rauschert – Eroded slope by terminus of railroad bridge; 13693, BkH.

CELASTRACEAE

**Celastrus orbiculata* Thunb. – On fence; along RR tracks; 6975, EC (C, vicin. MV).

**Euonymus europaea* L. – Woods (some located along Chagrin River); along RR tracks; 7010, vicin. GM (Br-MiH-St, C, vicin. MaH, MV).

CHENOPODIACEAE

**Chenopodium pumilio* R. Br. – Urban land including junction of alley and stone wall, and along curb; shore of Cuyahoga River; muck of exposed portion of bottom of Cuyahoga River; 6028, C (CH, I).

CONVOLVULACEAE

**Ipomoea hederacea* Jacq. – Along RR tracks; 7071, C.

Ipomoea pandurata (L.) G. F. W. Mey. – Railroad land; 13954, BeH.

CRASSULACEAE

**Sedum sarmentosum* Bunge – Rocky ledges along West Branch of Rocky River; on old, overgrown bricks along RR tracks; 11092, OF (C).

CUCURBITACEAE

**Citrullus lanatus* (Thunb.) Matsumura & Nakai – Waste areas (one urban and containing RR ballast); along creek; exposed portion of creek bed; 5498, C (CIH-EC, P).

**Cucumis melo* L. var. *cantalupensis* Naudin – Waste area; 8924, CIH-EC.

**Cucurbita pepo* L. – Vacant urban land; 5497, C.

DIPSACACEAE

**Dipsacus laciniatus* L. – Along highways; by RR tracks; along shore of Big Creek; 8283, C (Bk, M, MaH, P).

EBENACEAE

Diospyros virginiana L. – Clump of trees in old field along side of road (probable remnant of cultivation); 11286, B.

ELAEAGNACEAE

**Elaeagnus umbellata* Thunb. – Old fields; forest edge; shore of creek; along alley within urban area; along RR tracks; 7582, B (Be-MH, C, E, P, RoR, S, W).

ERICACEAE

**Calluna vulgaris* (L.) Hull – Old field by RR tracks; 11625, BV-W.

EUPHORBIACEAE

Acalypha gracilens A. Gray – Railroad land; 14119, MH.

Chamaesyce serpens (Kunth) Small – [*Euphorbia serpens* Kunth] Endangered; on bare dirt; 9224, C-CH (W).

Croton monanthogynus Michx. – In lawn; insolated land along RR tracks; 9275, C (Bk-C, MH).

**Euphorbia helioscopia* L. – Farm field; 13350, VV.

FABACEAE

Baptisia australis (L.) R. Br. ex Aiton f. – Endangered; overgrown land at end of city street; 13666, C.

Cercis canadensis L. – Along RR tracks; 11236, RoR.

**Lathyrus tuberosus* L. – Disturbed land at terminus of railroad bridge, field by power lines, weed in flower beds; 13627, BkH (B, C, S).

**Lotus tenuis* Waldst. & Kit. ex Willd. – Lawn; highly insolated dry land along RR tracks; beneath power lines; 11101, HH (C, G, I, P).

**Phaseolus vulgaris* L. – Shallow, insolated ditch; 8819, C.

Strophostyles leiosperma (Torr. & A. Gray) Piper – Insolated dry substrate along RR tracks; 11545, C-E.

**Vicia sativa* L. subsp. *nigra* (L.) Ehrh. – [*Vicia angustifolia* L.] Field, vacant urban land; garden; by power lines; 3491, C (BkH, CIH-EC, CH, FP-RoR-W, P, PP).

FAGACEAE

**Quercus robur* L. – Along railroad tracks; 13861, C.

GENTIANACEAE

**Centaurium pulchellum* (Sw.) Druce – Along alley; damp depression; wetland; lawn beneath bridge; 7258, C (BH, FP).

GERANIACEAE

**Geranium dissectum* L. – Overgrown dirt pile bordering parking lot; 11070, W.

HAMAMELIDACEAE

Liquidambar styraciflua L. – Along RR tracks; 11664, C.

HIPPOCASTANACEAE

**Aesculus hippocastanum* L. – In woods; along path through woods; 12198, W (EC).

HYPERICACEAE

Hypericum gentianoides (L.) Britton, Sterns & Poggenb. – Very abundant in meadow; 8926, HH.

Hypericum gymnanthum Engelm. & A. Gray – Endangered; field; 11273, I.

Hypericum majus (A. Gray) Britton – Potentially threatened; field; 11566, S (I).

JUGLANDACEAE

Carya ovalis (Wangenh.) Sarg. – Materials were distinguished from *C. glabra* based on nature of fruit dehiscence. Woods; 1058, GH-VV (B).

LAMIACEAE

**Mentha × gracilis* Sole – By beaver pond; 8472, B.

**Origanum vulgare* L. – Along RR tracks; vacant, shaded urban land; 11187; L (C).

**Prunella laciniata* (L.) L. – SR. Along path in woods; 11098, GM-M.

Salvia reflexa Hornem. – RR ballast; dirt pile; along pond; 4397, C (W).

Trichostema brachiatum L. – [*Isanthus brachiatus* (L.) Britton, Sterns & Poggenb.] Cinder on urban land; along RR tracks; 3170, C (C-E, CH, MH).

LARDIZABALACEAE

**Akebia quinata* (Houtt.) Decne. – Woodlands; 7206, Bt (C, P).

MALVACEAE

**Alcea rosea* L. – [*Althaea rosea* (L.) Cav.] South side of Big Creek; 8414, C (CIH-EC, MH).

**Malva alcea* L. – Disturbed insolated land; periphery of field; 13766, C.

MENYANTHACEAE

**Nymphoides peltata* (Gmel.) Kuntze – Pond; 8648, Bn.

NELUMBONACEAE

Nelumbo lutea Willd. – Center of beaver pond; 8375, GM-M.

OLEACEAE

**Fraxinus excelsior* L. – SR. At forest edge bordering road; 8450, SH.

**Syringa vulgaris* L. – Along RR tracks; 12061, RoR.

ONAGRACEAE

**Epilobium parviflorum* Schreb. – Forest edge; seep in urban area; shore of Euclid Creek; by beaver pond; 8579, CIH-EC (C, M-GM, P).

Oenothera pilosella Raf. – Wet meadow; 14901, P-PH.

OXALIDACEAE

**Oxalis corniculata* L. – Crack between pavement and wall of house; 13354, P.

PAPAVERACEAE

**Papaver somniferum* L. – Waste land at terminus of railroad bridge; 13669, BkH.

PASSIFLORACEAE

Passiflora incarnata L. – Threatened; insolated soil near railroad tracks; 14184, C.

PEDALIACEAE

**Sesamum orientale* L. – SR. Emerged portion of bottom of Big Creek; 9059, C.

PRIMULACEAE

**Lysimachia vulgaris* L. – From dense population within swamp; 13853, VV.

RANUNCULACEAE

**Clematis terniflora* Alph. de Candolle – Scrambler over low-growing vegetation along RR tracks; 11421, C-EC.

**Clematis vitalba* L. – Along RR tracks; 11194, L.

**Ranunculus bulbosus* L. – Lawn along road; yard; 5931, B.

**Ranunculus sardous* Crantz – Lawn of Metropark polo field; 14211, MoH-HV.

Xanthorhiza simplicissima Marsh. – Woods by dump in Forest Hill Park; 5495, EC.

ROSACEAE

Amelanchier sanguinea (Pursh) Alph. de Candolle – Endangered; forest edge at upper edge of slope; 9517, C.

Amelanchier stolonifera Wiegand – [*Amelanchier spicata* (Lam.) K. Koch] Field by RR tracks; 10730, BV-W.

**Duchesnea indica* (Andr.) Focke – Along RR tracks; woods; wetland; 9638, L (B, C, CIH-EC).

**Prunus mahaleb* L. – By dirt embankment in waste area; along RR tracks; 10673, BV-W (MH).

- **Prunus subhirtella* Miq. – Damp woods by Rocky River; 6338, C.
 **Pyracantha coccinea* M. Roemer – Field, insolated slump along Rocky River; 8838, C.
 **Rubus caesius* L. – Woodland; 14905, GM.
Rubus frondosus Bigelow – Field, along creek in woodland, along railroad tracks; 7038, BP-NO-OT (C, P, W).
Rubus recurvicaulis Blanch. – SR. Insolated, disturbed land near road; 13737, P.

RUBIACEAE

- **Galium odoratum* (L.) Scop. – [*Asperula odorata* L.] Dry, level woods along RR tracks; abandoned house site; 10711, BV (B).
 **Galium verum* L. – Large population in Great Meadow of Forest Hill Park; terminus of road through Gordon Park; 4024, EC (C).
Hedyotis nigricans (Lam.) Fosberg var. *nigricans* [– *Houstonia nigricans* (Lam.) Fernald] Potentially threatened; flat, disturbed, highly insolated urban terrain; 4079, C.

RUTACEAE

- **Phellodendron lavalleyi* Dode – SR. Along railroad tracks; 13673, C.
 **Tetradium daniellii* (Benn.) Hartley – [*Evodia daniellii* (Benn.) Hemsl.] SR. Disturbed land along urban road; 7924, C.

SALICACEAE

- **Salix cinerea* L. – By water along RR tracks; 10640, Bk-C.
Salix × *glatfelteri* C. K. Schneid. – Forest edge; 14908, I.
Salix humilis Marsh. – Along RR tracks; 11830, G.
 **Salix matsudana* Koidzumi var. *tortuosa* Rehder f. – [*S. babylonica* L. var. *tortuosa*] Amid boulders facing Lake Erie; wetland; forest edge; insolated dump; field and waste land bordering RR tracks; 6502, C (EC, G, I, P).
 **Salix pentandra* L. – Swamp; 12378, GM-M.
 **Salix purpurea* L. – Swamp; 14967, SeH (Bc).

SAPINDACEAE

- **Koelreuteria paniculata* Laxm. – Along RR tracks; 11716, C.

SCROPHULARIACEAE

- **Antirrhinum majus* L. – Insolated, disturbed urban land; dry slope at terminus of railroad bridge; exposed portion of creek bed; 5078, C (BkH, P).
Aureolaria laevigata (Raf.) Raf. – Colony along forest edge in Forest Hill Park; 4088, EC.
 **Kickxia elatine* (L.) Dumort. – Damp depression in insolated, vacant, urban land; fill-dirt; along RR tracks; 4115, C (C-CH, P).
Leucospora multifida (Michx.) Nutt. – Along RR tracks; damp depression in insolated, vacant urban land; 4120, C (MH).
 **Linaria dalmatica* (L.) P. Mill. – Along RR spur; 11507, E.
Nuttallanthus canadensis (L.) D. A. Sutton – [*Linaria canadensis* (L.) Chaz.] Endangered; near RR tracks; *Loos s.n.*, L.

- **Paulownia tomentosa* (Thunb.) Siebold & Zucc. ex Steud. – Along RR tracks; 11511, C-E.
- **Veronica anagallis-aquatica* L. – By water along RR tracks; edge of Chagrin River; 4184, C (vicin. GM, WaH).
- **Veronica hederifolia* L. – Rich woods; shaded embankment along RR tracks; 10773, RoR (C-BkH, CH).
- **Veronica polita* Fries – Along railroad tracks; insolated bare dirt; lawn; 4226, C (Bk-C-Li).

SOLANACEAE

- **Physalis philadelphica* Lam. – [*Physalis ixocarpa* auct. non Brot. ex Hornem.] Near creek; 14159, Bk.

ULMACEAE

- Celtis occidentalis* L. – Along RR tracks; by pond; in forest along Ohio and Erie Canal; 10817, L (C-BkH, CH, RoR).
- **Ulmus glabra* Huds. – Along RR tracks; 6387, C.
- **Ulmus pumila* L. – Along road; along RR tracks; along Rocky River; in woodlands; 12156, C (BkH, CIH-EC, MH).

VIOLACEAE

- Viola bicolor* Pursh – [*V. rafinesquei* Greene; *V. kitaibeliana* J. A. Schult. var. *rafinesquei* Fernald] Weed in park; *Anthony s.n.*, C.
- **Viola odorata* L. – Includes formas with white flowers, dark-blue flowers, and individual flowers with a combination of blue and white. Waste area; second growth by shed; lawns; 2096, EC (C, CIH, NR).

VITACEAE

- **Ampelopsis brevipedunculata* (Maxim.) Trautv. – Forest edges; along RR tracks; 7788, C (Be, CIH, CIH-SH, RoR).
- Ampelopsis cordata* Michx. – Growing on vegetation along side of road; 4912, C.
- Vitis vulpina* L. – Overgrown field; 11834, CH.